

Appl. No. 10/521,900

Preliminary Amdt. Date: October 4, 2005

**Amendments to the Claims**

This listing of claims will replace all prior version and listings of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A process for preparing a polymeric hydroperoxide which in a redox reaction forms free-radical polymer but no low molecular weigh free radical, characterized in that a synthetic polymer which comprises comprising at least one tertiary hydroxyl group or olefin function and has no further groups which are reactive toward the peroxidation reagent used is introduced into a mixture of and is reacted with concentrated hydrogen peroxide and a concentrated mineral acid.
2. (Original) The process as claimed in claim 1, characterized in that  $H_2O_2$  having a concentration of from 50 to 70% is used.
3. (Currently Amended) The process as claimed in claim 1 ~~or 2~~, characterized in that sulfuric acid having a concentration of from 50 to 80% is used as concentrated mineral acid.
4. (Currently Amended) The process as claimed in claim 1 ~~any of the preceding claims~~, characterized in that the polymer is used as a solution in an organic solvent.
5. (Currently Amended) The process as claimed in claim 1 ~~any of the preceding claims~~, characterized in that a polysiloxane polyol, polyether polyol or polyester polyol is used as starting material.
6. (Currently Amended) The process as claimed in claim 1 ~~any of the preceding claims~~, characterized in that the reaction is carried out at a temperature of from +10 to +60°C.

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1. ~~A process for preparing a polymeric hydroperoxide which in a redox reaction forms free-radical polymer but no low molecular weight free radical, characterized in that a synthetic polymer which comprises at least one tertiary hydroxyl group or olefin function and has no further groups which are reactive toward the peroxidation reagent used is introduced into a mixture of concentrated hydrogen peroxide and a concentrated mineral acid.~~
7. (Currently Amended) The process as claimed in claim 1 ~~any of the preceding claims~~, characterized in that a polysiloxane polyol dissolved in a lower alcohol is used.
8. (Original) A process for preparing copolymers by redox polymerization using a peroxidic polymerization initiator, characterized in that, to avoid formation of homopolymers, a hydroperoxide prepared by adding a synthetic polymer which comprises at least one tertiary hydroxyl group or olefin function and has no further groups which are reactive toward the peroxidation reagent used to a mixture of concentrated hydrogen peroxide and a concentrated mineral acid is used as redox polymerization initiator and the copolymerization is carried out at a temperature below 90°C.
9. (Original) The process as claimed in claim 8, characterized in that the polymer is used as a solution in an organic solvent.
10. (Currently Amended) The process as claimed in claim 8 ~~or 9~~, characterized in that a polyether polyol, polyester polyol or polysiloxane polyol is used as starting material.